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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,211	06/29/2001	Marcel F.C. Schemmann	US010299	9327

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
CURS, NATHAN M	

ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/896,211	SCHEMMANN ET AL.	
	Examiner	Art Unit	
	Nathan Curs	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: the referred related application number is omitted (page 4, line 1).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 9-12, 15 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 9-11, the applicant discloses the back facet monitor providing a DC current level (page 6, lines 3-13), but does not disclose the back facet monitor providing the claimed RF level. In addition, an RF level is inherently not a DC level.

Regarding claim 12, the applicant discloses that the oscillator's output signal is coupled to the RF attenuator output (figs. 4 and 5, element 410), but does not disclose that the oscillator's output is coupled to an input of an RF detector as claimed.

Regarding claim 15, the applicant discloses a filter for filtering the oscillator signal in the receiver (fig. 4, element 440 and page 9, lines 9-16), but does not disclose an oscillator of about 100 kHz in the receiver.

Regarding claim 16, the applicant discloses a receiver where the receiver oscillator feedback loop includes a demodulator (fig. 4, element 540), but does not disclose the claimed device to modulate the oscillator feedback.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7, 21-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 23 and 28 recite the limitation "the attenuation circuit". There is insufficient antecedent basis for these limitations in the claims.

Claim 21 recites the limitation "the first transmitter feedback loop". There is insufficient antecedent basis for this limitation in the claim.

Claims 22 and 24 recite the limitation "the second transmitter feedback loop". There is insufficient antecedent basis for this limitation in the claims.

Claims 25 recites the limitation "the third transmitter feedback loop". There is insufficient antecedent basis for this limitation in the claim.

Claim 26 recites the limitation "said third transmitter feedback loop". There is insufficient antecedent basis for this limitation in the claim.

Claims 27 and 28 recite the limitation "said oscillator". There is insufficient antecedent basis for this limitation in the claims.

Claims 29 recites the limitation "the first receiver feedback loop". There is insufficient antecedent basis for this limitation in the claim.

Claim 30 recites the limitation "the second receiver feedback loop". There is insufficient antecedent basis for this limitation in the claim.

Claims 31 and 32 recite the limitation "said oscillator feedback loop". There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-6, 8, 13, 14, 17-20, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiappetta (US Patent No. 6687466) in view of Little et al. (US Patent No. 5267071).

Regarding claim 1, Chiappetta discloses a transmitter apparatus, for maintaining a stable RF level in an optical link (Chiappetta: col. 1, lines 19-36 and col. 2, lines 7-22), said apparatus comprising: a plurality of feedback loops operationally connected to said transmitter section (Chiappetta: fig. 3, elements Laser Bias Control, Atten. Control, and Bias Control). However, Chiapetta does not disclose a receiver apparatus. Little et al. disclose a receiver apparatus, for maintaining a stable RF level in an optical link (Little et al.: col. 3, line 29 to col. 4, line 37), said apparatus comprising: a plurality of feedback loops operationally connected to said receiver section (Little et al.: fig. 4, elements 417 and 418). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the optical receiver of Little et al. with the optical transmitter of Chiappetta in order to form a stable RF-based optical transmission system.

Regarding claim 2, Chiappetta in view of Little et al. disclose the apparatus of claim 1, wherein the transmitter feedback loops adjust output power and compensate for temperature changes (Chiappetta: fig. 3, element 314 and col. 6, lines 5-8); and the receiver feedback loops provide RF level stabilization effects and provide gain at proper places in circuitry (Little et al: fig. 4, elements 410, 417 and col. 8, lines 35-38 and lines 61-64).

Regarding claim 3, Chiappetta in view of Little et al. disclose the apparatus of claim 2, wherein the feedback loops operationally connected to said transmitter section include a first, second, and third transmitter section feedback loops (Chiappetta: fig. 3, elements 312, 314, 316, Atten. Control, Bias Control , and Laser Bias Control).

Regarding claim 4, Chiappetta in view of Little et al. disclose the apparatus of claim 2, wherein the feedback loops operationally connected to said receiver section include a first and second receiver section feedback loops (Little et al.: fig. 4, elements 410, 413, 414, 415, 417 and 418).

Regarding claim 5, Chiappetta in view of Little et al. disclose the apparatus of claim 3, wherein the first transmitter feedback loop is a constant power feedback loop (Chiappetta: fig. 3, element Atten. Control and col. 6, lines 22-26).

Regarding claim 6, Chiappetta in view of Little et al. disclose the apparatus of claim 3, wherein the second transmitter feedback loop is a bias current feedback loop connected between the transmitter section and an attenuation circuit in an RF path (Chiappetta: fig. 3, element Bias Control and col. 4, lines 56-63).

Regarding claim 8, Chiappetta in view of Little et al. disclose the apparatus of claim 3, wherein the second transmitter feedback loop is a bias current feedback loop (Chiappetta: fig. 3, element 314 and col. 6, lines 5-8).

Regarding claim 13, Chiappetta in view of Little et al. disclose the apparatus of claim 4, wherein the first receiver feedback loop is an optical modulation voltage (OMV) feedback loop, said optical modulation voltage feedback loop connected to RF circuitry in said receiver section (Little et al: fig. 4, element 412 and col. 8, lines 39-60).

Regarding claim 14, Chiappetta in view of Little et al. disclose the apparatus of claim 4, wherein the second receiver feedback loop is a pilot signal feedback loop, said pilot feedback loop connected to RF circuitry in said receiver section (Little et al.: col. 4, lines 9-23). Little does not disclose that the pilot signal of the receiver is an oscillator signal; however, Chiappetta disclose a pilot signal of the transmitter (col. 1, lines 59-62 and col. 5, lines 53-58), which is an oscillator based pilot signal (Chiappetta: col. 8, lines 7-12). It would have been obvious to one of ordinary skill in the art at the time of the invention that the oscillator pilot signal of the Chiappetta transmitter could be transmitted and received by the receiver of Little et al. in order to maintain a stable RF level, using an oscillator pilot tone, as taught by Chiappetta and Little et al.

Regarding claim 17, Chiappetta discloses a transmit method for maintaining a stable RF level in an optical link (Chiappetta: col. 1, lines 19-36 and col. 2, lines 7-22), said method comprising: providing a plurality of feedback loops to said optical signal transmitter section (Chiappetta: fig. 3, elements Laser Bias Control, Atten. Control, and Bias Control). However, Chiappetta does not disclose a receive method. Little et al. disclose a receive method, for maintaining a stable RF level in an optical link (Little et al.: col. 3, line 29 to col. 4, line 37), said method comprising: providing a plurality of feedback loops to said optical signal receiver section (Little et al.: fig. 4, elements 417 and 418), It would have been obvious to one of ordinary skill in the art at the time of the invention to use the optical receiver of Little et al. with the optical transmitter of Chiappetta in order to form a stable RF-based optical transmission system.

Regarding claim 18, Chiappetta in view of Little et al. disclose the method of claim 17, wherein the transmitter feedback loops adjust output power and compensate for temperature changes (Chiappetta: fig. 3, element 314 and col. 6, lines 5-8); and the receiver feedback loops provide RF level stabilization effects and provide gain at proper places in circuitry (Little et al: fig. 4, elements 410, 417 and col. 8, lines 35-38 and lines 61-64).

Regarding claim 19, Chiappetta in view of Little et al. disclose the method of claim 17, wherein the feedback loops operationally connected to said transmitter section include a first, second, and third transmitter feedback loops (Chiappetta: fig. 3, elements 312, 314, 316, Atten. Control, Bias Control , and Laser Bias Control).

Regarding claim 20, Chiappetta in view of Little et al. disclose the method of claim 17, wherein the feedback loops operationally connected to said receiver section include a first and second receiver feedback loops (Little et al.: fig. 4, elements 410, 413, 414, 415, 417 and 418).

Regarding claim 33, Chiappetta discloses a transmitter apparatus comprising: an optical signal transmitter section; an RF stabilization system operationally connected to said optical signal transmitter section; (Chiappetta: col. 1, lines 19-36 and col. 2, lines 7-22). However, Chiappetta does not disclose an optical signal receiver section and an RF stabilization system connected to the receiver section. Little et al. disclose a receiver apparatus comprising: an optical signal receiver section; and an RF stabilization system operationally connected to said optical signal receiver section (Little et al.: col. 3, line 29 to col. 4, line 37). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the optical receiver of Little et al. with the optical transmitter of Chiappetta in order to form a stable RF-based optical transmission system.

Regarding claim 34, Chiappetta in view of Little et al. disclose the optical transmission system of claim 33, wherein the optical transmission system is a cable television (CATV) system (Chiappetta: col. 3, lines 46-55; and Little et al.: col. 1, lines 6-9).

Conclusion

8. Any inquiry concerning this communication from the examiner should be directed to N. Curs whose telephone number is (703) 305-0370. The examiner can normally be reached M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached at (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

M.R. Sedighian

M.R. SEDIGHIAN
Patent Examiner
Art Unit: 2633

Notice of References Cited	Application/Control No. 09/896,211	Applicant(s)/Patent Under Reexamination SCHEMMANN ET AL.	
	Examiner Nathan Curs	Art Unit 2633	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,687,466 B1	02-2004	Chiappetta, Joseph F.	398/193
	B	US-5,267,071 A	11-1993	Little et al.	398/162
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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